

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1 1. (Currently amended) A system comprising:
2 a plurality of devices, wherein devices within the plurality of devices
3 communicate with incompatible protocols;
4 a first device in the plurality of devices having a universal contextual
5 interface, wherein the universal contextual interface is implemented in Java~~the~~
6 universal contextual interface associated with at least one instruction for
7 transferring contextual data associated with the first device; and
8 wherein the universal contextual interface comprises instructions
9 that are particular to the first device, wherein the instructions can:
10 be understood and performed by the plurality of devices to
11 enable the plurality of devices to communicate and transfer
12 contextual data with the first device;
13 provide event notifications to the plurality of devices with
14 respect to changes in contextual data for the first device; and
15 enable the plurality of devices to receive user interfaces to
16 allow users of the plurality of devices to view changed contextual
17 data or enable the plurality of devices to receive data from the first
18 device; and
19 wherein contextual data includes information with respect to the
20 first device including type, owner, history of use, whether the first device
21 is currently in use, other operating status information, identity, location on

22 network, administrative domain, information with respect to one or more
23 users of the first device or files stored at the first device; and
24 a second device in the plurality of devices that invokes the universal
25 contextual interface of the first device by executing the instructions at least one
26 instruction to transfer the contextual data associated with the first device between
27 the first device and at least one of the other devices in the plurality of devices, the
28 plurality of devices having no prior knowledge of each other;
29 wherein the universal contextual interface is directly invoked by the
30 second device to allow the contextual data to be transferred to the second device;
31 and
32 wherein the second device registers as a listener with the first device
33 through a notification interface of the first device to receive event notifications
34 with respect to changes in the contextual data associated with the first device; and
35 wherein the universal contextual interface allows components using
36 different operating systems, communication protocols, file formats, and data types
37 to transfer context information between each other without requiring the
38 components to use domain-specific interfaces, protocols, or data format.

1 2. (Previously Presented) The system as set forth in claim 1 wherein the at
2 least one of the plurality of devices comprises the second device.

1 3. (Previously Presented) The system as set forth in claim 1 wherein the
2 first device sends a context object to the second device to be used by the second
3 device to transfer the contextual data.

1 4. (Previously Presented) The system as set forth in claim 1 wherein the
2 second device receives a context object from the first device to be used by the at
3 least one of the plurality of devices for receiving contextual data transmitted from

4 the first device.

1 5. (Previously Presented) The system as set forth in claim 1 wherein the at
2 least one of the plurality of devices uses the contextual data as a criteria to
3 authorize the first device or the second device to access instructions, data or
4 operations associated with the at least one of the plurality of devices.

1 6. (Previously Presented) The system as set forth in claim 1 wherein the
2 universal contextual interface or a context object have source-specific, object-
3 oriented mobile code that can be understood and performed by the at least one of
4 the plurality of devices to receive contextual data.

1 7. (Previously Presented) The system as set forth in claim 1 wherein the
2 plurality of devices further comprise at least one software application or at least
3 one file.

1 8. (Previously Presented) The system as set forth in claim 1 wherein the
2 first device further comprises a historical database having at least one record of
3 data provided by the second device during invocation of the universal contextual
4 interface.

1 9. (Previously Presented) The system as set forth in claim 1 wherein the
2 second device invokes a universal notification interface to register the at least one
3 of the plurality of devices to receive an event notification each time the contextual
4 data changes.

1 10. (Previously Presented) The system as set forth in claim 1 wherein the
2 contextual data comprises executable computer language instructions, or a type,

- 3 operating status, identity, location, administrative domain or environment
4 information of at least one of the plurality of devices.

1 11. (Currently amended) A method for providing context information, the
2 method comprising:

3 invoking a universal contextual interface associated with a first device in a
4 plurality of devices, ~~the contextual interface associated with at least one~~
5 ~~instruction for transferring contextual data associated with the first device;~~
6 wherein devices within the plurality of devices communicate with incompatible
7 protocols, ~~and wherein the universal contextual interface is implemented in Java,;~~

8 wherein the universal contextual interface comprises instructions
9 that are particular to the first device, wherein the instructions can:

10 be understood and performed by the plurality of devices to
11 enable the plurality of devices to communicate and transfer
12 contextual data with the first device;

13 provide event notifications to the plurality of devices with
14 respect to changes in contextual data for the first device; and

15 enable the plurality of devices to receive user interfaces to
16 allow users of the plurality of devices to view changed contextual
17 data or enable the plurality of devices to receive data from the first
18 device; and

19 wherein contextual data includes information with respect to the
20 first device including type, owner, history of use, whether the first device
21 is currently in use, other operating status information, identity, location on
22 network, administrative domain, information with respect to one or more
23 users of the first device or files stored at the first device; and

24 wherein invoking the universal contextual interface involves executing the
25 instructions at least one instruction to transfer the contextual data associated with

26 the first device between the first device and a second device in the plurality of
27 devices, the plurality of devices having no prior knowledge of each other; and
28 wherein the universal contextual interface is directly invoked by the
29 second device to allow the contextual data to be transferred to the second device;
30 and

31 wherein the second device registers as a listener with the first device
32 through a notification interface of the first device to receive event notifications
33 with respect to changes in the contextual data associated with the first device; and
34 wherein the universal contextual interface allows components using
35 different operating systems, communication protocols, file formats, and data types
36 to transfer context information between each other without requiring the
37 components to use domain-specific interfaces, protocols, or data format.

1 12. (Previously Presented) The method as set forth in claim 11 wherein the
2 second device or a third device in the plurality of devices perform the invoking
3 and executing.

1 13. (Previously Presented) The method as set forth in claim 11 further
2 comprising sending a context object to the at least one of the plurality of devices
3 to be used for transferring the contextual data.

1 14. (Previously Presented) The method as set forth in claim 11 further
2 comprising using the contextual data as a criteria to authorize the second device
3 to access instructions, data or operations associated with the one of the plurality
4 of devices.

1 15. (Previously Presented) The method as set forth in claim 11 wherein the
2 universal contextual interface or a context object have source-specific, object-

- 3 oriented mobile code that can be interpreted and performed by the first device or
- 4 the at least one of the plurality of devices to receive contextual data.

1 16. (Previously Presented) The method as set forth in claim 11 wherein the
2 plurality of devices further comprise at least one software application or at least
3 one file.

1 17. (Original) The method as set forth in claim 11 further comprising
2 storing in a historical database at least one record of data provided during
3 invocation of the universal contextual interface.

1 18. (Previously Presented) The method as set forth in claim 11 further
2 comprising invoking a universal notification interface to register the at least one
3 of the plurality of devices to receive an event notification each time the contextual
4 data changes.

1 19. (Previously Presented) The method as set forth in claim 11 wherein the
2 contextual data comprises executable computer programming language
3 instructions or a type, operating status, identity, location, administrative domain
4 or environment information of at least one of the devices or of at least one user of
5 the plurality of devices.

1 20. (Currently amended) A computer readable medium having stored
2 thereon instructions for providing context information, which when executed by
3 at least one processor, causes the processor to perform:
4 invoking a universal contextual interface associated with a first device in a
5 plurality of devices, the contextual interface associated with at least one
6 instruction for transferring contextual data associated with the first device;

7 wherein devices within the plurality of devices communicate with incompatible
8 protocols, and wherein the universal contextual interface is implemented in Java;
9 wherein the universal contextual interface comprises instructions
10 that are particular to the first device, wherein the instructions can:
11 be understood and performed by the plurality of devices to
12 enable the plurality of devices to communicate and transfer
13 contextual data with the first device;
14 provide event notifications to the plurality of devices with
15 respect to changes in contextual data for the first device; and
16 enable the plurality of devices to receive user interfaces to
17 allow users of the plurality of devices to view changed contextual
18 data or enable the plurality of devices to receive data from the first
19 device; and
20 wherein contextual data includes information with respect to the
21 first device including type, owner, history of use, whether the first device
22 is currently in use, other operating status information, identity, location on
23 network, administrative domain, information with respect to one or more
24 users of the first device or files stored at the first device; and
25 wherein invoking the universal contextual interface involves executing the
26 instructions at least one instruction to transfer the contextual data associated with
27 the first device between the first device in and a second device in the plurality of
28 devices, the plurality of devices having no prior knowledge of each other; and
29 wherein the universal contextual interface is directly invoked by the
30 second device to allow the contextual data to be transferred to the second device;
31 and
32 wherein the second device registers as a listener with the first device
33 through a notification interface of the first device to receive event notifications
34 with respect to changes in the contextual data associated with the first device; and

35 wherein the universal contextual interface allows components using
36 different operating systems, communication protocols, file formats, and data types
37 to transfer context information between each other without requiring the
38 components to use domain-specific interfaces, protocols, or data format.

1 21. (Previously Presented) The medium as set forth in claim 20 wherein
2 the second device or a third device in the plurality of devices perform the
3 invoking and executing.

1 22. (Previously Presented) The medium as set forth in claim 20 further
2 comprising sending a context object to the at least one of the plurality of devices
3 to be used for transferring the contextual data.

1 23. (Previously Presented) The medium as set forth in claim 20 further
2 comprising using the contextual data as a criteria to authorize the second device
3 to access instructions, data or operations associated with the one of the plurality
4 of devices.

1 24. (Previously Presented) The medium as set forth in claim 20 wherein
2 the universal contextual interface or a context object have source-specific, object-
3 oriented mobile code that can be interpreted and performed by the first device or
4 the at least one of the plurality of devices to receive contextual data.

1 25. (Previously Presented) The medium as set forth in claim 20 wherein
2 the plurality of devices further comprise at least one software application or at
3 least one file.

1 26. (Original) The medium as set forth in claim 20 further comprising

- 2 storing in a historical database at least one record of data provided during
- 3 invocation of the universal contextual interface.

- 1 27. (Previously Presented) The medium as set forth in claim 20 further
- 2 comprising invoking a universal notification interface to register the at least one
- 3 of the plurality of devices to receive an event notification each time the contextual
- 4 data changes.

- 1 28. (Previously Presented) The medium as set forth in claim 20 wherein
- 2 the contextual data comprises executable computer programming language
- 3 instructions or a type, operating status, identity, location, administrative domain
- 4 or environment information of at least one of the devices or of at least one user of
- 5 the plurality of devices.